

Global Live Cell Imaging Market Projected to Reach USD 10.76 Billion by 2032, With Rapid Growth at 7.2% CAGR

The global live cell imaging market size was USD 5.65 Bn in 2022 and is expected to reach USD 10.76 Bn by 2032, and register a rapid revenue CAGR of 7.2%.

NEW YORK CITY, NY, UNITED STATES, June 30, 2023 /EINPresswire.com/ -- The global [Live Cell Imaging Market](#) had a value of USD 5.65 Billion in 2022. It is projected to reach USD 10.76

Billion by 2032, with a rapid compound annual growth rate (CAGR) of 7.2% during the forecast period. The growth in market revenue is primarily driven by increasing demand for cell biology research and live cell imaging systems in various industries such as pharmaceuticals, biotechnology, and academic research. The use of high-content screening methodologies and the prevalence of chronic diseases also contribute to the market's expansion.

Live cell imaging is a technique that enables scientists to study cells, their structures, functions, and properties in real time. This approach has significantly transformed research in molecular interactions, cells, proteins, and other related activities.

Get Free Sample PDF (To Understand the Complete Structure of this Report [Summary + TOC]) @ <https://www.reportsanddata.com/download-free-sample/1749>

Furthermore, the market is experiencing growth due to the development of advanced technologies such as confocal microscopy, super-resolution microscopy, and high-content screening. Hospitals and medical research facilities are increasingly demanding premium live cell imaging systems for studying chronic diseases and drug discovery. The availability of big data analytics and the ease of use of connected devices have further increased the adoption of modern live cell imaging systems in research projects. This has led to the growing popularity of Artificial Intelligence (AI)-driven image analysis and data management technology.

Segments Covered in the Report –



Reports And Data

- The global live cell imaging market can be categorized based on different aspects. Firstly, in terms of product types, the market includes microscopes, cell culture systems, image analysis software, and consumables.
- Microscopes are essential tools in live cell imaging, enabling scientists to observe cells and their activities in real time. Cell culture systems provide a controlled environment for the growth and maintenance of cells during imaging experiments. Image analysis software plays a crucial role in analyzing and interpreting the data obtained from live cell imaging. Consumables refer to the various materials and reagents used in live cell imaging experiments.
- From a technological perspective, the market is segmented into fluorescence resonance energy transfer (FRET), fluorescence recovery after photobleaching (FRAP), high-content screening (HCS), and others. FRET is a technique that measures energy transfer between fluorophores, providing information about molecular interactions within cells. FRAP involves bleaching a specific area of fluorescently labeled cells and tracking the recovery of fluorescence, which allows researchers to study cellular dynamics. HCS is a powerful method that combines automated microscopy and image analysis to screen large numbers of cells or compounds for various applications. Other technologies may include advanced imaging techniques and innovative approaches that enhance live cell imaging capabilities.
- In terms of applications, the market is categorized into cell biology, stem cells, drug discovery, and others. Cell biology encompasses the study of cells and their functions, including processes such as cell division, signaling, and differentiation. Live cell imaging plays a crucial role in advancing our understanding of cellular mechanisms and processes. Stem cells are of great interest in regenerative medicine and developmental biology, and live cell imaging allows researchers to monitor their behavior and characteristics. In drug discovery, live cell imaging is used to evaluate the effects of potential drugs on cellular processes and to study drug interactions with cells. The "others" category may include applications such as cancer research, neurobiology, and immunology, among others, where live cell imaging plays a significant role.

Access Full Report Description with Research Methodology and Table of Contents @ <https://www.reportsanddata.com/report-detail/live-cell-imaging-market>

Strategic development:

- Thermo Fisher Scientific introduced the CellInsight NXT High-Content Analysis (HCA) Platform in 2021, which is a new imaging system designed for live-cell analysis. This platform offers researchers a more comprehensive understanding of complex cellular processes, facilitating the discovery of new targets for therapeutic interventions.
- In 2020, Carl Zeiss AG made an announcement about acquiring a majority stake in arivis AG, a provider of imaging software. This strategic acquisition aims to expand Carl Zeiss AG's range of imaging software, which plays a crucial role in the field of live-cell imaging.

- Olympus Corporation launched the FVMPE-RS confocal microscope in 2020. This state-of-the-art microscope allows researchers to obtain high-quality imaging data from live cells while minimizing cellular damage, thereby enhancing the accuracy of research outcomes.
- General Electric Company introduced the DeltaVision OMX SR live-cell imaging platform in 2019. This advanced platform empowers researchers to capture high-quality imaging data from live cells, contributing to improved research accuracy.
- Nikon Corporation unveiled the A1 HD25/A1R HD25 confocal microscope in 2018. This cutting-edge microscope enables researchers to acquire high-quality imaging data from live cells while minimizing cell damage, thereby enhancing the accuracy of research findings.

Competitive Landscape:

Thermo Fisher Scientific Inc. is a prominent player in the live cell imaging market. The company focuses on providing innovative solutions for scientific research and offers a wide range of imaging systems and related products. Thermo Fisher Scientific aims to facilitate comprehensive analysis of complex cellular processes through their CellInsight NXT High-Content Analysis (HCA) Platform.

Carl Zeiss AG, a renowned optics and optoelectronics company, has made significant strides in the imaging software domain. The company acquired a majority stake in arivis AG to expand its imaging software offerings, recognizing the critical role software plays in live-cell imaging.

Olympus Corporation is known for its advanced imaging solutions, and in 2020, they launched the FVMPE-RS confocal microscope. This cutting-edge microscope enables researchers to capture high-quality imaging data from live cells with minimal damage, thereby enhancing the accuracy of research outcomes.

General Electric Company has made its mark in the live cell imaging market with the DeltaVision OMX SR platform. This platform enables researchers to obtain high-quality imaging data from live cells, contributing to improved research accuracy.

Nikon Corporation is a leading manufacturer of imaging and optical products. In 2018, they introduced the A1 HD25/A1R HD25 confocal microscope, which allows researchers to acquire high-quality imaging data from live cells while minimizing cellular damage.

Request a customization of the report @ <https://www.reportsanddata.com/request-customization-form/1749>

Danaher Corporation, PerkinElmer Inc., Bruker Corporation, Leica Microsystems GmbH, GE Healthcare, and Biotech Instruments Inc. are other notable companies in the live cell imaging

market. These companies offer a range of imaging solutions and equipment, contributing to the advancements in live cell imaging technology.

Browse for more reports:

Corneal Topographers Market - <https://www.reportsanddata.com/report-detail/corneal-topographers-market>

COVID-19 Vaccine Packaging Delivery Device Market - <https://www.reportsanddata.com/report-detail/covid-19-vaccine-packaging-delivery-device-market>

Empty Intravenous (IV) Bags Market - <https://www.reportsanddata.com/report-detail/empty-intravenous-bags-market>

Hangover Rehydration Supplements Market - <https://www.reportsanddata.com/report-detail/hangover-rehydration-supplements-market>

Healthcare Patent Filing Outsourcing Market - <https://www.reportsanddata.com/report-detail/healthcare-information-system-market>

John W.

Reports and Data

+1 212-710-1370

[email us here](#)

Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/642286253>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2023 Newsmatics Inc. All Right Reserved.